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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

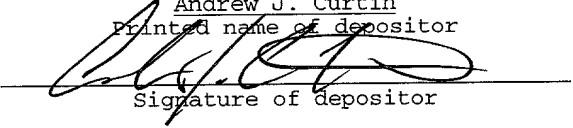


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Andrew J. Curtin
Printed name of depositor


Signature of depositor

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TRANSMITTAL LETTER

The Assistant Commissioner for Patents
Washington, D.C. 20231

ATTN: BOX PATENT APPLICATION

Sir:

Transmitted herewith for filing is the patent application
of: Lei Cao, Jinyun Zhang, Philip Orlik and Daqing Gu

**FOR: Trellis Based Maximum Likelihood Signal Estimation
Method and Apparatus for Blind Joint Channel Estimation and
Signal Detection**

Enclosed are:

- [21] pages of specification, claims and abstract
- [4] sheets of formal drawings
- [x] Declaration and Power of Attorney
- [X] Assignment of the application
- [X] Information Disclosure Statement

The filing fee is calculated as follows:

Parameter	Value	Unit
Temperature	25.0	°C
Pressure	1.0	atm
Flow rate	1.0	L/min
Concentration	0.1	mol/L
pH	7.0	
Wavelength	254	nm
Scan rate	1.0	nm/min
Integration time	1.0	s
Resolution	0.5	nm
Slit width	1.0	nm
Detector	Photodiode array	
Software	ChemStation	
Column	C18	
Mobile phase	Water/Acetonitrile	
Gradient	0-100% ACN in 10 min	
Injection volume	10	μL
Sample concentration	1.0	mg/mL
Recovery	100	%
Stability	1.0	min
Linearity	0.999	
LOD	0.1	μg/mL
LOQ	0.3	μg/mL
Accuracy	100	%
Precision	1.0	%
Correlation coefficient	0.999	
Regression equation	$y = 0.999x$	
Intercept	0.0	
Slope	0.999	
Standard deviation	0.001	
Mean	0.001	
Variance	0.001	
Skewness	0.001	
Kurtosis	0.001	
Shapiro-Wilk test	0.999	
Levene test	0.999	
Normality test	0.999	
Chi-square test	0.999	
F-test	0.999	
T-test	0.999	
ANOVA	0.999	
Regression analysis	0.999	
Correlation analysis	0.999	
Principal component analysis	0.999	
Cluster analysis	0.999	
Discriminant analysis	0.999	
Factorial analysis	0.999	
Canonical discriminant analysis	0.999	
Linear discriminant analysis	0.999	
Quadratic discriminant analysis	0.999	
Cubic discriminant analysis	0.999	
Logistic regression	0.999	
Probit regression	0.999	
Poisson regression	0.999	
Negative binomial regression	0.999	
Generalized linear model	0.999	
Generalized additive model	0.999	
Generalized linear mixed model	0.999	
Generalized additive mixed model	0.999	
Generalized linear mixed model with random effects	0.999	
Generalized additive mixed model with random effects	0.999	
Generalized linear mixed model with random effects and covariates	0.999	
Generalized additive mixed model with random effects and covariates	0.999	
Generalized linear mixed model with random effects and covariates and interactions	0.999	
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TOTAL FEE	\$ 780.00
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Respectfully submitted,
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